INTERPRETATION OF CRUSTAL PHASE CHARACTERISTICS IN IRAN AND THE SURROUNDING REGION DETERMINED FROM ILPA DATA

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The presence or absence of crustal phases such as Sn and Lq at the Iranian Long Period Array (ILPA) show a complex pattern in Iran and the surrounding region. A few degrees of azimuth may mark the boundary between an area where a phase is present and where it is absent. Previous work has identified the southern Caspian region as an area of poor Sn propagation. This study confirms that result and also identifies southeastern Makran, part of the Iran plateau, and part of the Zagros region as areas where the Sn phase is absent. In general, lack of an Sn phase can be associated with paths crossing regions of Quaternary and Tertiary volcanism. Lg propagation is present over most of Iran with the exception of the Zagros region between the Oman line and the Kazerun line. This is an area with extensive mobile infra-Cambrian salt. Other regions identified with no Lg phase are the Caspian and Black Sea areas, which have been noted by other workers. Multimax Corp.supplied the data for this study.

This work was performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under contract No. W-7405-ENG-48.